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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/294,563	04/20/1999	KURT E. SCHMIDT	08640/018001	6271

24313 7590 07/23/2004

TERADYNE, INC
321 HARRISON AVE
BOSTON, MA 02118

EXAMINER

NGUYEN, DUC MINH

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 07/23/2004

31

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/294,563

Applicant(s)

SCHMIDT ET AL.

Examiner

Duc Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19,21-24,26,27,30,31 and 34-57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11,24,26,27,30,31 and 34-57 is/are allowed.
- 6) ☒ Claim(s) 12, 19 is/are rejected.
- 7) ☒ Claim(s) 13-18 and 21-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eichen et al (6,292,539) in view of Posthuma et al (6,349,130).

Consider claim 12. Eichen teaches a method of qualifying a line for data transmission, comprising identifying a proxy line (i.e., line intended to be tested/qualified) in a cable carrying the customer line (i.e., other cable pairs in the same binder group as the loop to be qualified; col. 3, ln. 16-21; col. 6, ln. 13-20); performing electrical measurements on the proxy line (col. 6, ln. 21-46); and predicting the data rate for the customer line (e.g., a method consistent with the present invention performs some or all of data collection steps 240, 250, 260, and 270. These steps are not necessarily performed in a particular order, and some steps may be performed simultaneously. For example, FIG. 5 shows steps 240 and 250 being performed at the same time as steps 260 and 270. Each of these steps involves obtaining information about the loop to be qualified from a database or a test or measurement system in the network, and all of the information obtained is used as input to step 280, which applies a plurality of rules to the information to model the response of the network and determine which digital subscriber services are available on the loop. Step 240 may also include a query of a separate database (not

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shown in FIG. 4) that stores recent measurements of the loop length. Referring again to FIG. 5, in step 250 the server queries facilities database 130 using the unique loop identifier to determine the services on other cable pairs in the same binder group as the loop to be qualified; col. 6, ln. 13-20) from the measurements (col. 6, ln. 47-60; col. 7, ln. 14-30). It is noted that the system uses the information from other cable pairs in the same binder group as the loop to be qualified to make the determination regarding the DSL services. Eichen, however, does not clearly state whether the test is performed by one-ended electrical measurements or not.

Posthuma teaches performing one-ended electrical measurement on a subscriber line (col. 2, ln. 3-11; col. 3, ln. 35-45; col. 3, ln. 55 to col. 4, ln. 5, ln. 12-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Posthuma into the teachings of Eichen in order to provide reliable results irrespective of whether terminal equipment is installed on the telephone line.

3. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eichen et al (6,292,539) in view of Posthuma et al (6,349,130) and Burgess (6,111,861).

Consider claim 19. Eichen teaches a method of qualifying a line for data transmission, comprising identifying a proxy line (i.e., line intended to be tested/qualified) in a cable carrying the customer line (i.e., other cable pairs in the same binder group as the loop to be qualified; col. 3, ln. 16-21; col. 6, ln. 13-20); performing electrical measurements on the proxy line (col. 6, ln. 21-46); and predicting the data rate for the customer line (e.g., a method consistent with the present invention performs some or all of data collection steps 240, 250, 260, and 270. These steps are not necessarily performed in a particular order, and some steps may be performed

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simultaneously. For example, FIG. 5 shows steps 240 and 250 being performed at the same time as steps 260 and 270. Each of these steps involves obtaining information about the loop to be qualified from a database or a test or measurement system in the network, and all of the information obtained is used as input to step 280, which applies a plurality of rules to the information to model the response of the network and determine which digital subscriber services are available on the loop. Step 240 may also include a query of a separate database (not shown in FIG. 4) that stores recent measurements of the loop length. Referring again to FIG. 5, in step 250 the server queries facilities database 130 using the unique loop identifier to determine the services on other cable pairs in the same binder group as the loop to be qualified; col. 6, ln. 13-20) from the measurements (col. 6, ln. 47-60; col. 7, ln. 14-30). It is noted that the system uses the information from other cable pairs in the same binder group as the loop to be qualified to make the determination regarding the DSL services. Eichen, however, does not clearly state whether the test is performed by one-ended electrical measurements or not.

Posthuma teaches performing one-ended electrical measurement on a subscriber line (col. 2, ln. 3-11; col. 3, ln. 35-45; col. 3, ln. 55 to col. 4, ln. 5, ln. 12-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Posthuma into the teachings of Eichen in order to provide reliable results irrespective of whether terminal equipment is installed on the telephone line.

Eichen in view of Posthuma does not explicitly teach determining whether the line at issue is billed as a high speed analog data line or an analog voice (or low speed analog data) line.

Burgess teaches determining whether the line at issue is billed as a high speed analog data line or an analog voice (or low speed analog data) line (col. 10, ln. 21-63).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Burgess into the teachings of Eichen in view of Posthuma, so that appropriate charging rate can be accurately applied to the communication connection.

Allowable Subject Matter

4. Claims 1-11, 24, 26-27, 30-31, 34-57 are allowed.
5. Claims 13-18, 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 3/4/04 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., use of a proxy line is intended to allow a test, even of the loop is not a working pair) are not EXPLICITLY recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Eichen further states, "if the loop is not on a working pair, the server chooses to continue loop qualification, although not all tests will be available for the loop."

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is 703-308-7527. The examiner can normally be reached on 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Duc Nguyen
Primary Examiner
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7/19/04